

PROJECT

PROY-NOM-004-SCT/1999

**FOR THE TRANSPORT OF
HAZARDOUS MATERIALS AND WASTES**

**“IDENTIFICATION SYSTEM OF UNITS
INTENDED FOR THE LAND TRANSPORT OF
HAZARDOUS MATERIALS AND WASTES”**

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INDEX

1. PURPOSE
2. APPLICABILITY
3. REFERENCES
4. DEFINITIONS
5. GENERAL PRINCIPLES
6. PLACARD SPECIFICATIONS
7. BIBLIOGRAPHY
8. HARMONIZATION WITH INTERNATIONAL STANDARDS
9. COMPLIANCE
10. ENFORCEMENT
11. SANCTIONS
12. VALIDITY
13. TRANSITORY

**PROJECT FOR
OFFICIAL MEXICAN STANDARD
PROY-NOM-004-SCT/1999
IDENTIFICATION SYSTEM OF UNITS
INTENDED FOR THE TRANSPORT OF
HAZARDOUS MATERIALS AND WASTES**

1. OBJECTIVE

This standard establishes the characteristics and dimensions of the placards that vehicle units, trucks, trailers, autotanks, car tanks, containers, tank containers, portable tanks and intermediate bulk containers as well as all other units of motor transportation and railroad, in order to identify the class of risk of the hazardous substances, materials or wastes being transported.

2. APPLICABILITY

This Official Mexican Standard applies compulsorily to the shippers, carriers and consignees of hazardous substances, materials and waste transported through the general means of communication by land, sea and air.

3. REFERENCES

For the applicability of this standard it is necessary to consult the following Official Mexican Standards:

- | | |
|-------------------|---|
| NOM-002-SCT2/1994 | LISTING OF THE MOST COMMONLY TRANSPORTED HAZARDOUS SUBSTANCES AND MATERIALS. |
| NOM-003-SCT/1999 | CHARACTERISTICS OF THE LABELS OF PACKAGES AND PACKAGINGS DESTINED TO THE TRANSPORT OF HAZARDOUS SUBSTANCES, MATERIALS AND WASTES. |
| NOM-010-SCT2/1994 | PROVISIONS FOR COMPATIBILITY AND SEGREGATION FOR THE STORAGE AND TRANSPORT OF HAZARDOUS SUBSTANCES, MATERIALS AND WASTES. |

NOM-011-SCT2/1994	CONDITIONS FOR THE TRANSPORT OF HAZARDOUS SUBSTANCES, MATERIALS AND WASTES IN LIMITED QUANTITIES
NOM-023-SCT4/1995	CONDITIONS FOR HANDLING AND STORAGE OF HAZARDOUS MATERIALS IN PORTS, TERMINALS AND VESSELS AT SEA.
NOM-033-SCT4/1996	POLICIES FOR THE ENTRY OF HAZARDOUS MATERIALS TO PORT INSTALLATIONS.
NOM-054-ECOL-1993	WHICH ESTABLISHES THE PROCEDURE TO DETERMINE INCOMPATIBILITY BETWEEN TWO OR MORE WASTES CONSIDERED AS HAZARDOUS BY THE OFFICIAL MEXICAN STANDARD NOM-052-ECOL-1993.
NOM-052-ECOL-1995	WHICH ESTABLISHES THE CHARACTERISTICS OF HAZARDOUS WASTES, A LISTING OF THEM AND LIMITS THAT MAKE WASTE DANGEROUS DUE TO ITS TOXICITY TO THE ENVIRONMENT.
NOM-087-ECOL-1995	WHICH ESTABLISHES REQUISITES FOR SEGREGATION, PACKING, STORING, COLLECTION, TRANSPORT, TREATMENT AND FINAL DISPOSITION OF BIOLOGICAL AND INFECTIOUS WASTES GENERATED IN HOSPITALS AND ESTABLISHMENTS PROVIDING MEDICAL ASSISTANCE.

4. DEFINITIONS.

4.1	placard:	Printed or engraved sign that identifies the contents and risks of the product being transported.
4.2	shipper:	Person or company that either by himself or representing a third party, hires transport services for hazardous materials or wastes.
4.3	preponderance:	Greater risk of a substance in relation to another.

- 4.4 symbol: An image showing in graphic form and ease of interpretation, the meaning of the risk inherent to the hazardous material.
- 4.5 identification system for units destined to the transport of hazardous materials and wastes: Visually graphic communication form through placards, containing symbols, numbers, letters or texts to identify the hazardous substance, material or waste being transported.
- 4.6 residue: Hazardous substances, materials or wastes that remain in the containers, packages or packagings after their being emptied or unpacked.
- 4.7 multimodal transportation: means the transportation of goods by at least two modes of transport, through a multimodal transportation contract, from a place of origin from which a multimodal transportation carrier takes the goods in custody to another place designated for its delivery.

5. GENERAL PRINCIPLES.

- 5.1 Vehicle units, trailers, autotanks, car tanks, containers, tank containers, portable tanks and intermediate bulk containers utilized in the transport of hazardous substances, materials or wastes, must bear identification placards as safety signals.
 - 5.1.1 Placards must show the main risk associated with the hazardous substance, material, or waste, as well as the United Nations identification number.
 - 5.1.2 They must be placed in the upper half of the lateral and back views of the autotransportation unit, in the cases of tractor-trucks or trucks must always install one in the front as far as it does not impairs drivers visibility, while for full vehicle combinations with two semi-trailers, placards will be installed in both trailers.
 - 5.1.3 In railroad car units, placards must be affixed on both sides and on the ends on the placard holders with which they are equipped and that are obligatorily installed according to the unit's design while in the case of tank containers they should be affixed on the upper superior half of the lateral, front and back views. (figure No. 1).
- 5.2 For all Classes, excepting those of Class 7, these placards must adhere to the models as shown on NOM-003-SCT/1999. Placard corresponding to Class 7, is shown on figure No. 9.

- 5.3 When the transport unit has a tank with several separate internal tanks and carries more than one hazardous substance, material or waste, must bear the corresponding placarding for each material on both sides of the corresponding individual tank.
- 5.4 When transporting jointly in the same vehicle unit different risk class of materials, the unit will be identified utilizing at least two placards identifying the bigger risk materials.
- 5.5 Placards must be placed in such a manner to avoid obstructing or covering its visibility with other type of information in the vehicles, such as advertising or publicitary messages or others.

6. PLACARD SPECIFICATIONS

Placards must be manufactured according to the following characteristics:

- 6.1 Should be of high resistance materials to weather conditions so that under normal use do not decolorate or suffer deformation to avoid deterioration of the information contained within them.
- 6.2 Be of a fixed type, or unmovable in operational conditions or painted, according to the use of the transportation unit. These placards must be affixed in such a manner that its permanency is guaranteed being prohibited the use of placards of the “book” or “magazine” type (movable figures and numbers).
- 6.3 Must have a romboid shape with minimum dimension of 250 mm. x 250 mm. per side, with a line of the same color as the symbol, 12.5 mm. inside the edge and parallel to the edge as it is shown on figure No. 2. The only exceptions with regards to shape, will be the temperature placard, the fumigation placard, the rectangular orange plate for the United Nations identification number and the placard for marine pollutant
- 6.4 Correspond to the label for the class of the dangerous goods in question with respect to the color and symbol.(see figures 3 through 11)
- 6.5 Display the number of the risk class or division (being materials of class 1 and 5, as well as in the case of substances of class 1, compatibility group letter) of the hazardous substances of the case.

- 6.6 On the upper part of the placard the international symbol of the substance being transported will be placed, according to the risk classification, on the lower half, the corresponding risk class or division number; in its center, on a rectangle, the substance identification number will be placed, according to the assigned number by the United Nations for the substance in question, except on the placards indicating a subsidiary risk, which will only show the corresponding risk symbol. (see figure 14)

This number can be consulted on Standard NOM-002-SCT2/1994 and on the list of materials corresponding to air and ocean transportation. In the case of non existence of the specific product number, must be compared with the generical number of the lists, considering the risk class of the substance being transported.

- 6.7 When not placing the identification number inside the placard and in its place on the rectangle within the center of the placard, risk is indicated with words, a rectangular plate of orange color of 120 mm. height and 300 mm. width with a 10 mm. black line inside edge, must be affixed next to the placard (see figure no. 2). For international transportation, the use of placards without any text must be considered in accordance to point 6.6.
- 6.8 Each material identification digit (United Nations number), must have maximum dimensions of 80 mm. high x 50 mm. wide.
- 6.9 The autotransport, trucks, intermediate bulk containers, portable tanks, containers, tank containers and any type of railroad hauling units, unloaded or empty, that had contained hazardous materials and wastes, during its transportation, must bear the corresponding identification placards of the materials that were originally carried, until the time cleaning and decontamination procedures have been effected.
- 6.10 When the autotransport, trucks, intermediate bulk containers, portable tanks, containers, tank containers and railroad hauling units have been cleaned and decontaminated (free of residues) and bear the proper certificate to validate it, will no longer require to bear identification placards.
- 6.11 In the case of transporting liquid form substances at a temperature equal or superior to 100° C, or a solid substance at a temperature equal or superior to 240° C, must carry additional to the corresponding identification placard, on each side and on each end of the unit a temperature placard. This placard will have a triangular shape with dimensions of at least 250 mm. per side and bearing red and white colors, as indicated on figure No. 12.

- 6.12 In the case of a fumigated transportation unit must bear the fumigation warning placard for the duration of the fumigation effect, as shown on figure No. 12

This placard of rectangular form must have at least sides of 250 mm by 300 mm and bear black and white colors.

- 6.13 In the case of units transporting materials considered ocean pollutants, to be transported by sea, must bear a placard additional to the one for the corresponding risk. Such placard will be triangular in shape, with minimum dimensions of 250 mm per side, and must be black and white in accordance to figure No. 13.
- 6.14 Subsidiary risks specified on NOM-002-SCT2/1994 or on the lists of hazardous materials corresponding to air and sea transportation must be indicated by placards. However, units transporting materials of more than one class, should not bear a subsidiary risk placard, if the placard corresponding to that risk is already signaled by a principal risk placard. (see figure 14)

7. BIBLIOGRAPHY.

Recommendations on the Transport of Dangerous Goods, issued by the United Nations Organization, ninth revised edition, New York and Geneva, 1995. International Maritime Code for Dangerous Goods (IMDG); Ammendments 28/96, Technical Instructions for the Safe Transport of Dangerous Goods by Air of ICAO (1997-1998)

8. HARMONIZATION WITH INTERNATIONAL STANDARDS.

This Official Mexican Standard is equivalent with the Recommendations on the Transport Of Dangerous Goods of the United Nations Organization, Chapter 13; 1995, Ninth revised edition, United Nations, New York, 1995, as well as the International Maritime Dangerous Goods Code (IMDG); Ammendement 28/96, annex 18 to the Chicago Agreement on International Civil Aviation, Safe transport of Dangerous Goods by Air; Technical Instructions for the Safe Transport of Dangerous Goods by Air, ICAO.

9. COMPLIANCE.

This Standard is compulsory on the General Means of Communication for the Transport of Hazardous Materials and Wastes. Based upon provisions in the Civil Aviation Act; in the Regulations for the Land Transport of Hazardous Materials and Wastes and other international documents signed by our country for the land, sea and air transport.

10. ENFORCEMENT

The Secretariat of Communications and Transport, through the General Directorates involved, is the competent authority to enforce compliance of this Official Mexican Standard.

The evaluation of conformity will be performed according to the following guidelines:

- 10.1 Inspections performed by the Federal Highway Police, General Means of Communication Inspectors and duly credited personnel.
- 10.2 Through visual operational establishment, it will be verified that the placards (4 in autotransportation) of primary risk and in its case of subsidiary risk, correspond to the transported material according to the shipping documents and authorization or circulation permit for the unit.
- 10.3 Also that the vehicle dimensions correspond to the required size; colors corresponding to the risk being identified and that the UN number corresponds to the material being transported.
- 10.4 They must be in acceptable conditions, without mendings that may impair its interpretation.

11. SANCTIONS.

The non compliance of what is established within this Official Mexican Standard, will be sanctioned by this Secretariat, in accordance to what is established in the Regulations for the Land Transport of Hazardous Materials and Wastes and other legal ordainments that may be appliccable, without interference to those sanctions applied by other Federal Government Agencies, excercising their attributions, or of civil or criminal responsibility resultant thereof.

12. VALIDITY.

This Official Mexican Standard will be in force 60 days after its publication in the Official Register.

13. TRANSITORY.

This Official Mexican Standard abrogates NOM-004-SCT2/1994, published in the Official Register on September 13, 1995.

Mexico, D.F., September 22, 1999.

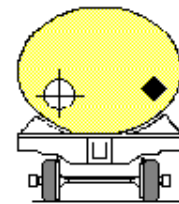
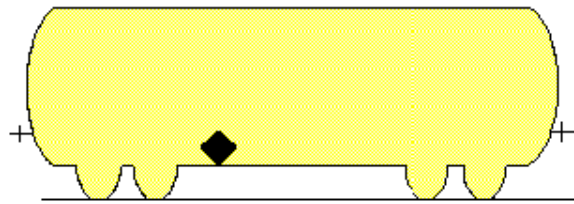
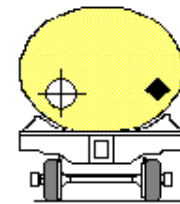
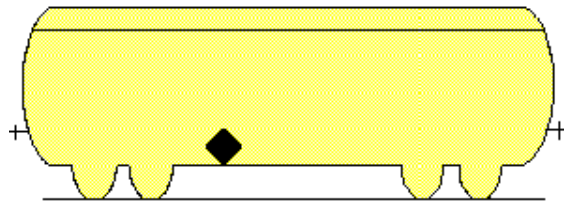
**THE UNDERSECRETARY OF TRANSPORT
AND CHAIRMAN OF THE NATIONAL
CONSULTATIVE COMMITTEES OF
STANDARDIZATION FOR LAND TRANSPORT
AND AIR TRANSPORT**

**THE COORDINATOR GENERAL OF PORTS
AND MERCHANT MARINE AND CHAIRMAN
OF THE NATIONAL CONSULTATIVE
COMMITTEE FOR STANDARDIZATION FOR
MARINE TRANSPORT AND PORTS**

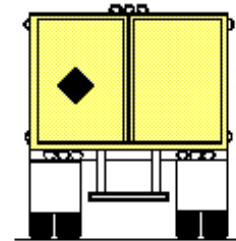
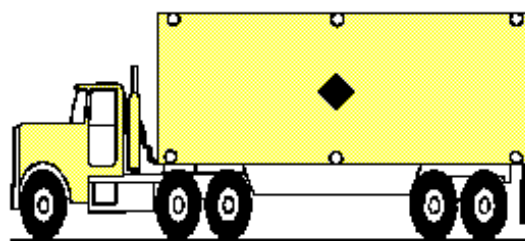
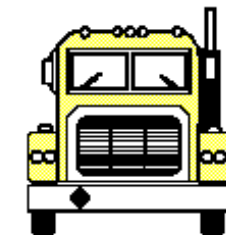
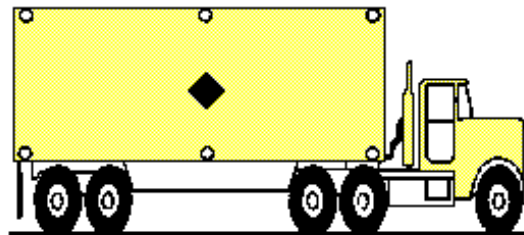
AARON DYCHTER POLTOLAREK

PEDRO PABLO ZEPEDA BERMUDEZ

ANNEX 1



◆ PLACARD LOCATION

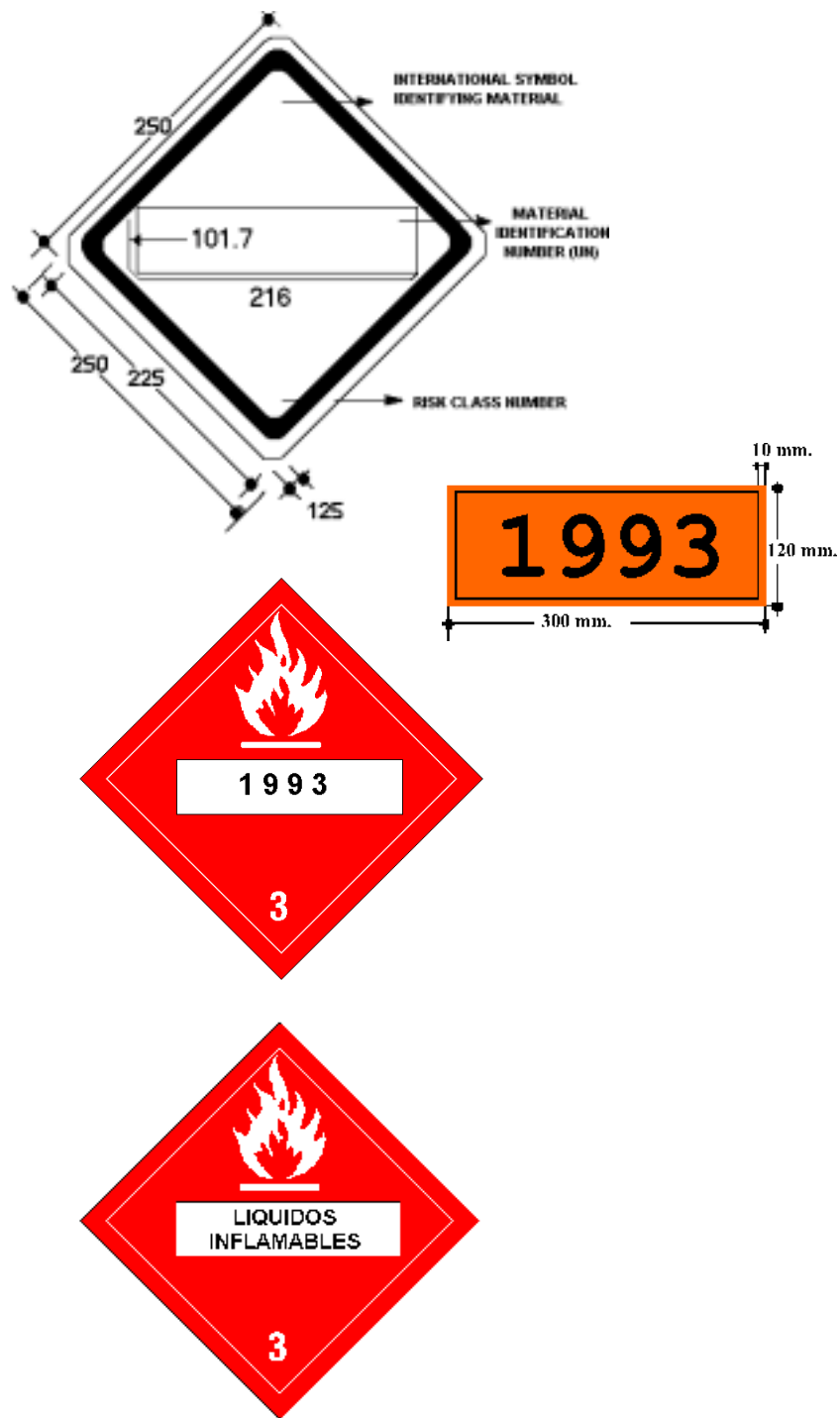


◆ PLACARD LOCATION

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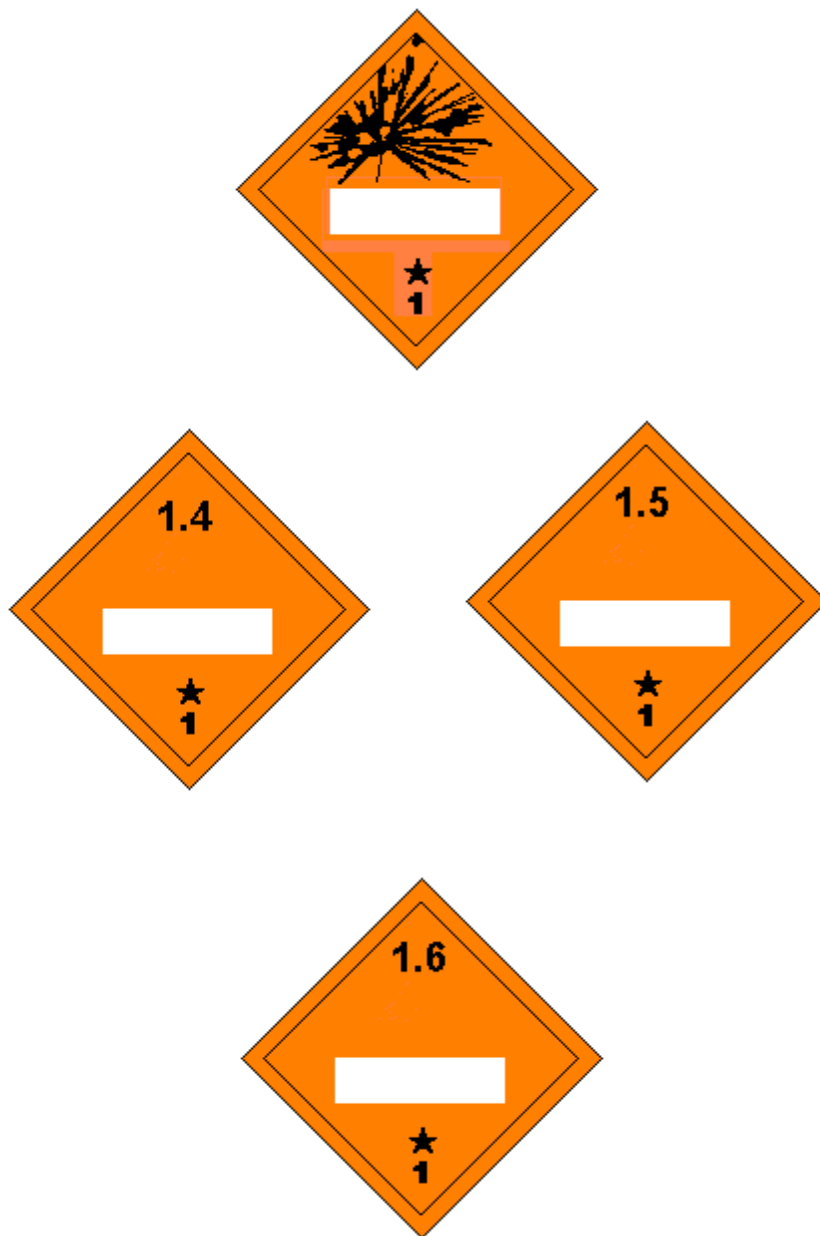
PLACARD LOCATION ON THE TRANSPORT UNITS

Fig. 1



MAY HAVE IN THE CENTER FRAME THE RISK CLASS IN WRITING AND ON THE BOTTOM HALF THE CLASS NUMBER AND A RECTANGLE IN ORANGE COLOR WITH THE **UN** IDENTIFICATION NUMBER IN BLACK.

**CLASS 1
EXPLOSIVES**



**CLASS 2
COMPRESSED, REFRIGERATED,
LIQUEFIED OR PRESSURE DISSOLVED GASES**



**CLASS 3
FLAMMABLE LIQUIDS**

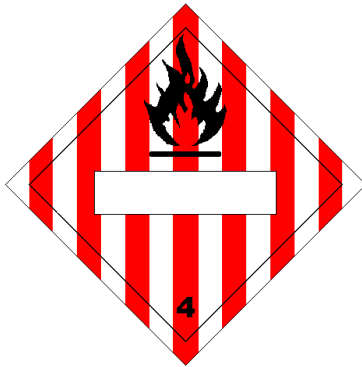


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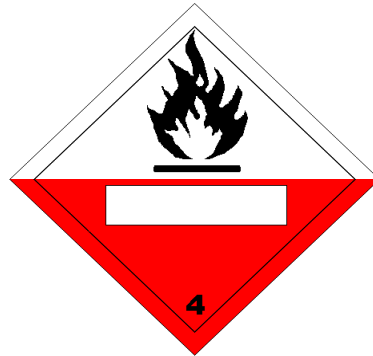
PLACARD MODELS FOR TRANSPORT

Fig. 5

**CLASS 4
FLAMMABLE SOLIDS**



DIVISION 4.1

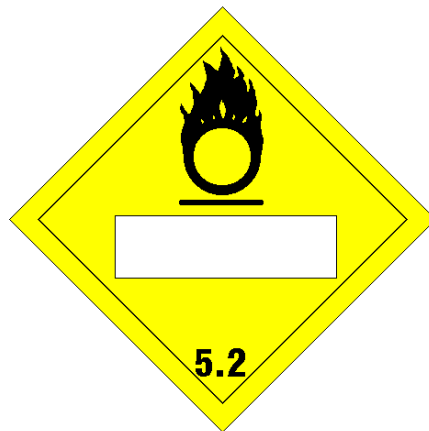
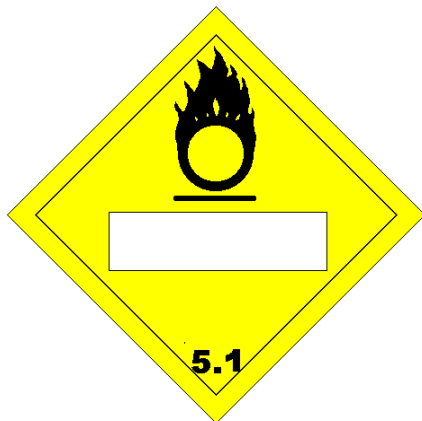


DIVISION 4.2



DIVISION 4.3

**CLASS 5
OXIDIZERS AND ORGANIC PEROXIDES**



**CLASS 6
ACUTE TOXICS (POISONS)
AND INFECTIOUS AGENTS**

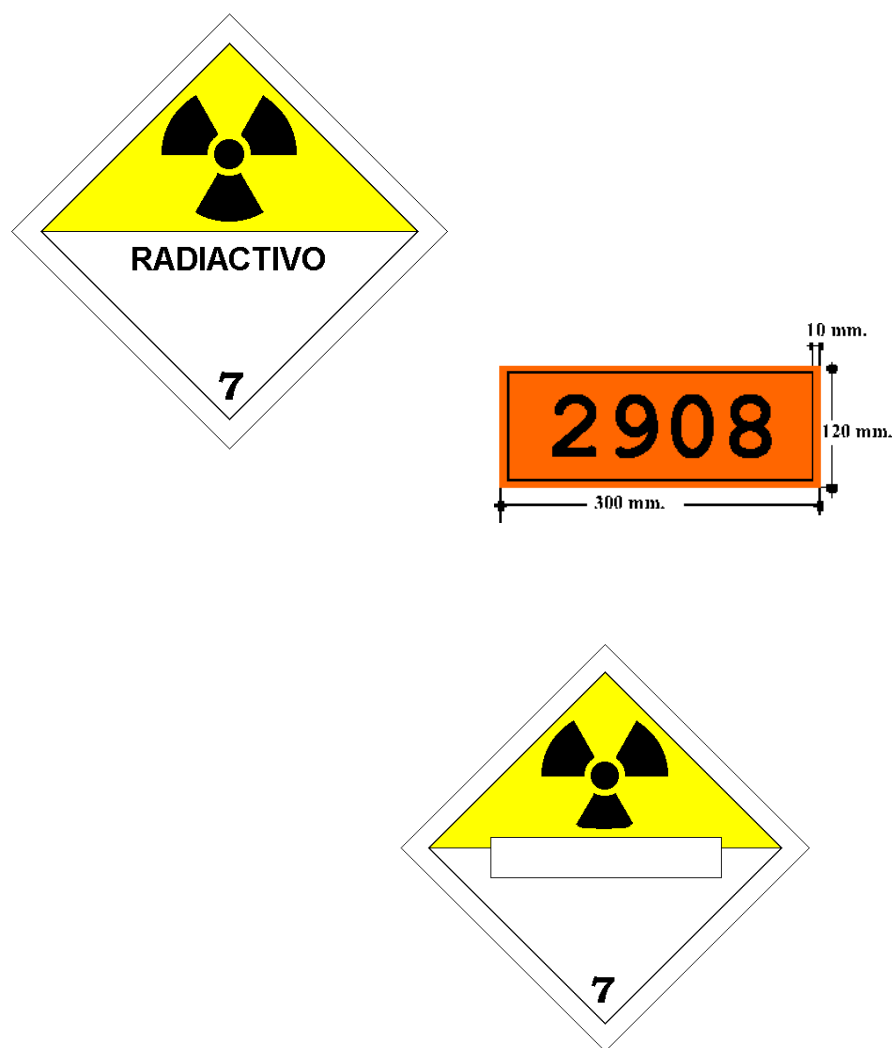


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PLACARD MODELS FOR TRANSPORT

Fig. 8

**CLASS 7
RADIOACTIVES**



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PLACARD MODELS FOR TRANSPORT

Fig. 9

**CLASS 8
CORROSIVES**

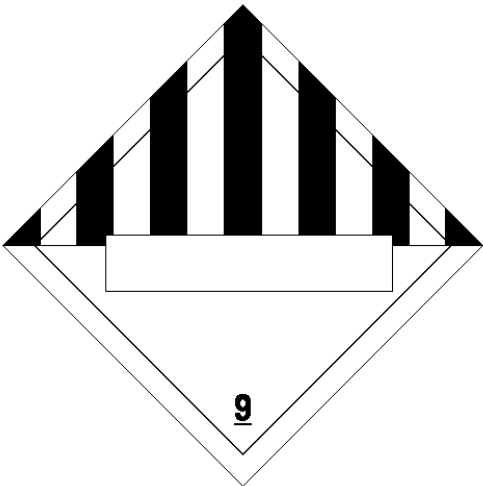


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PLACARD MODELS FOR TRANSPORT

Fig. 10

**CLASSE 9
MISCELLANEOUS**



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PLACARD MODELS FOR TRANSPORT

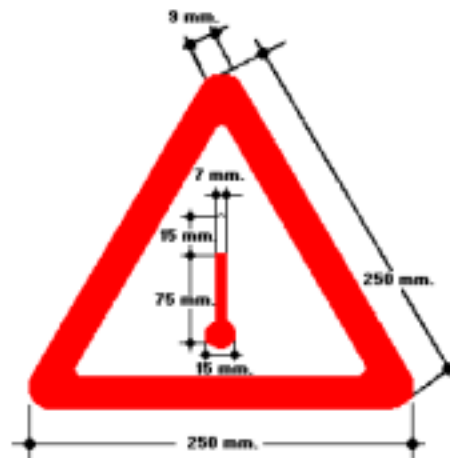
Fig. 11

FUMIGATION PLACARD



* **Insértense los datos que procedan**

TEMPERATURE PLACARD



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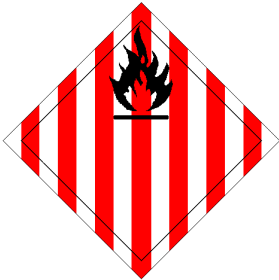
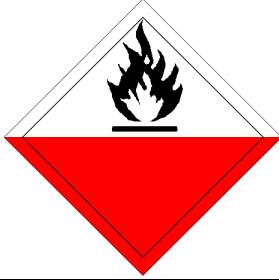




**PLACARD MODELS FOR FUMIGATED AND TEMPERATURE
CONTROLLED UNITS**

Fig. 12



MARINE POLLUTANT PLACARD

A TRIANGLE WITH A FISH IN THE CENTER AND A X MARK IN IT.
WHITE BACKGROUND WITH SYMBOL IN BLACK. DIMENSIONS;
250 MM PER SIDE AS MINIMUM

<p>EXPLOSIVES CLASS</p> 	<p>FLAMMABLE CLASS</p> 	
<p>FLAMMABLE SOLIDS CLASS</p> 	<p>SPONTANEOUS COMBUSTION SOLIDS CLASS</p> 	
<p>WATER REACTING SOLIDS CLASS</p> 	<p>OXIDIZERS AND ORGANIC PEROXIDES CLASS</p> 	
<p>POISONOUS CLASS</p> 	<p>CORROSIVE CLASS</p> 	
Esc.	PLACARD MODELS FOR SUBSIDIARY RISK IN TRANSPORT	Fig. 14